

Amendments to the claims:

The listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

1. (currently amended) A nitride micro LED (Light Emitting Diode) with high brightness, comprising:

a plurality of micro-sized luminous pillars ~~(40)~~ having an n-type GaN layer ~~(2)~~ formed on a substrate ~~(4)~~, and active layer 3 formed on the n-type GaN layer ~~(2)~~, and a p-type GaN layer ~~(4)~~ formed on the active layer ~~(3)~~;

a gap filling material ~~(5)~~ filled between the luminous pillars ~~(40)~~ to have substantially the same height as the luminous pillars ~~(40)~~;

a p-type transparent electrode ~~(6)~~ formed on a top surface ~~(41)~~ of the gap filling material ~~(5)~~ and the luminous pillars ~~(40)~~;

a p-type electrode ~~(7)~~ formed on the p-type transparent electrode ~~(6)~~; and

an n-type electrode ~~(8)~~ electrically connected to the n-type GaN layer ~~(2)~~, wherein an array of the luminous pillars is driven at the same time.

2. (currently amended) The nitride micro LED with high brightness according to claim 1, wherein the gap filling material ~~(5)~~ includes at least one selected from SiO₂, Si₃N₄, or a combination thereof, polyamide, and ZrO₂/SiO₂ or HfO₂/SiO₂.

3. (currently amended) The nitride micro LED with high brightness according to claim 2, wherein the gap filling material ~~(5)~~ is formed to have substantially the same height as the luminous pillars ~~(10)~~ through a CMP (Chemical Mechanical Polishing) process.
4. (currently amended) The nitride micro LED with high brightness according to claim 3, wherein a top surface of the p-type GaN layer ~~(4)~~ of the luminous pillars ~~(10)~~ has convex surfaces ~~(11a)~~ formed through the CMP process.
5. (currently amended) The nitride micro LED with high brightness according to claim 1, wherein the transparent electrode ~~(6)~~ comprises a combination of oxidized Ni/Au(NiO/Au) or an ITO (Indium Tin Oxide).
6. (currently amended) The nitride micro LED with high brightness according to claim 1, further comprising a pair of DBR (Distributed Bragg Reflectors) layers ~~9~~ formed on a top surface of the transparent electrode ~~(6)~~ and a bottom surface of the substrate ~~(1)~~, respectively.
7. (currently amended) The nitride micro LED with high brightness according to claim 1, further comprising an AR (Anti-reflection) layer coated on a top surface of the transparent electrode ~~(6)~~ or a bottom surface of the substrate ~~(1)~~.
8. (currently amended) The nitride micro LED with high brightness according to claim 1, wherein luminous pillars ~~(10)~~ have side surfaces ~~(10a)~~ formed obliquely.

9. (currently amended) The nitride micro LED with high brightness according to claim 8, further comprising a DBR layer ~~(9a)~~ made of $\text{ZrO}_2/\text{SiO}_2$ or $\text{HfO}_2/\text{SiO}_2$ and formed below the gap filling material ~~(5)~~ within gaps ~~(12)~~ between the luminous pillars ~~(40)~~.

10. – 23. (Cancelled)